

CLAIMS

We claim:

1. A method comprising:

5 a) receiving a stack of financial instrument sheets into a housing of an automated banking machine;

b) moving a first sheet bounding the stack in a first direction by engaging a first side of the first sheet with at least one sheet engaging portion of at least one picking member;

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c) engaging a second side of the first sheet opposed of the first side, with at least one first stripping portion, wherein the at least one first stripping portion corresponds to at least one recess extending transversely of the at least one sheet engaging portion;

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d) engaging the second side the first sheet with at least one second stripping portion, wherein the at least one second stripping portion corresponds in generally opposed engagement with at least one sheet engaging portion;

e) separating the first sheet from the stack by movement of the first sheet in the first direction while in engagement with the at least one sheet engaging portion, at least one first stripping portion and at least one second stripping portion.

5 2. The method according to claim 1 wherein (c) occurs in advance of (d).

3. The method according to claim 1 and further comprising:

10 f) determining at least one characteristic of the first sheet after it is removed from the stack through operation of the machine.

4. The method according to claim 3 wherein the financial instrument sheets include notes, and wherein in (f) the at least one characteristic is indicative of note validity.

15 5. The method according to claim 4 wherein in (f) the at least one characteristic further uniquely identifies a note.

6. The method according to claim 5 wherein the machine further includes a user interface, and further comprising:

20 receiving at least one identifying input through the user interface;

correlating the at least one identifying input with the at least one characteristic uniquely identifying a note through operation of the machine.

7. The method according to claim 3 wherein the financial instrument sheets include notes, and wherein in (f) the at least one characteristic is indicative of note denomination of the first sheet.

8. The method according to claim 3 and further comprising:

storing the first sheet in the machine with other sheets having the at least one characteristic.

9. The method according to claim 4 and further comprising:

g) moving notes determined in (f) as having the at least one characteristic indicative of note validity into a chest portion of the machine.

10. The method according to claim 9 and further comprising:

h) moving notes determined in (f) as not having the at least one characteristic indicative of note validity, into a storage area within a housing of the machine and outside the

chest portion.

11. The method according to claim 9 wherein the machine includes a user interface and a note dispenser, and further comprising:

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receiving at least one input through an input device of the user interface;

dispensing at least one note from the machine responsive to the at least one input.

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12. The method according to claim 1 wherein the at least one picking member comprises a cylindrical picking member, and wherein in (b) the first sheet is moved by rotating the cylindrical picking member in a first rotational direction.

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13. The method according to claim 12 wherein the cylindrical picking member includes at least annular recess, wherein the annular recess is transversely disposed of at least one sheet engaging portion, and wherein in (c) action of the at least one first stripping portion and the at least one annular recess impart a cross-sectional wave configuration to the first sheet.

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14. The method according to claim 1 and prior to (d) engaging the at least one second stripping portion with the at least one sheet engaging portion, wherein in (d) the first sheet is moved between the at least one sheet engaging portion and at least one second stripping portion.

15. The method according to claim 12 and further comprising, prior to (e) extending the at least one first stripping portion in the at least one annular recess.

16. The method according to claim 15 wherein the generally cylindrical picking member includes a first sheet engaging portion and a plurality of annular recesses with at least one annular recess disposed on each transverse side of the first sheet engaging portion, and further comprising a plurality of first stripping portions, wherein prior to (c) a plurality of first stripping portions extend in a plurality of annular recesses.

17. The method according to claim 12 wherein the at least one sheet engaging portion includes a high friction arcuate segment extending less than a full circumference of the generally cylindrical picking member, and wherein in (b) the generally cylindrical picking member rotates one rotation in the first rotational direction to separate the first sheet from the stack.

18. The method according to claim 17 wherein the at least one first stripping portion comprises at least one first roll surface, and the at least one second stripping portion comprises at least one second stripping roll surface, wherein in (c), (d) and (e) the at least one first roll surface and the at least one second roll surface remain stationary as the first sheet moves relative thereto in the first direction.

19. The method according to claim 18 and further comprising:

rotating the generally cylindrical picking member in a second rotational direction opposite of the first rotational direction;

rotating the at least one first and at least one second roll surfaces in cooperating relation with the picking member rotating in the second rotational direction to facilitate moving a sheet therebetween in a second direction opposed of the first direction.

10 20. The method according to claim 7 and further comprising:

receiving at least one account identifying input associated with an account through at least one input device of a user interface of the machine;

15 crediting the account an amount responsive to the denomination of the first sheet determined in (f).

21. The method comprising:

20 a) moving a stack of financial instrument sheets in a first direction in a chute of an automated banking machine apparatus;

b) moving a first sheet bounding one side of the stack in the first direction by engaging the first sheet with at least one moving picking member;

5 c) imparting a transverse wave configuration to the first sheet moving in the first direction by engaging the first sheet between the at least one moving picking member and at least one first stripping member;

10 d) moving the first sheet in engagement with the at least one picking member between the at least one picking member and at least one second stripping member, wherein prior to the first sheet moving between the at least one picking member and at least second stripping member the picking member and second stripping member are in biased abutting engagement.

15 22. The method according to claim 21 wherein (c) occurs prior to (d).

23. The method according to claim 22 and further comprising:

20 e) separating the first sheet from the stack through movement of the at least one picking member, and while the first sheet is engaged with the at least one first stripping member and the at least one second stripping member.

24. The method according to claim 23 and further comprising:

f) determining at least one characteristic of the first sheet after it is separated from the stack through operation of the machine.

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25. The method according to claim 24 wherein the sheets include notes, and wherein the at least one characteristic is indicative of genuineness of notes, and further comprising:

g) responsive to the determination in (f), either directing the first sheet in to a chest portion in the machine if the determination in (f) indicates the first sheet is a genuine note, or directing the first sheet into a sheet storage area within the machine but outside the chest portion if the determination in (f) indicates the first sheet is not determined to be a genuine note.

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26. The method according to claim 25 and subsequent to (e) and prior to (g) storing the first sheet temporarily in an escrow device in the machine.

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27. The method according to claim 26 wherein the machine includes a user interface including at least one input device, a plurality of notes stored in the chest portion, and at least one note dispensing device adapted to dispense notes stored in the chest portion from the machine, and further comprising:

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receiving at least one input from a user through at least one input device of the user interface;

dispensing at least one note from the machine to the user through operation of the at least one note dispensing device responsive to the at least one input.

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